

Abstract

A description is given of a fluorine-modified one- or two-component polyurethane resin having improved surface properties, which is obtainable by a) preparing a fluorine-modified polyurethane prepolymer having free isocyanate groups or free amino and/or hydroxyl groups, or a fluorine-modified polyol mixture having free hydroxyl groups (binder), and by b) preparing a fluorine-modified polyurethane resin having a polymer-bonded fluorine content of 1% to 4% by weight in the system as a whole by reacting the fluorine-modified polyurethane prepolymer from stage a) in the case of a one-component application with atmospheric moisture, or reacting the fluorine-modified polyurethane prepolymer or polyol mixture (binder) in the case of a two-component application with a crosslinker component (D) (curing agent), with a formulating component (F)(ii) in the presence if desired of a solvent component (L)(iii) and also of a catalyst. Through the use of suitable fluorinated macromonomers in the one- or two-component polyurethane resins of the invention it is possible to produce hard coating systems and/or surfaces having very low surface tensions and very high contact angles. Furthermore, the dirt pickup tendency of these polyurethane resins is also significantly reduced as compared with the known prior art.